

admitting tip of index finger, was found in the front bladder-wall. The rupture had remained extraperitoneal. The edges of the tear were stitched to the abdominal wall. Drainage of the space between bladder and symphysis. The bladder was washed out through the artificial fistula and the urethra. Drain-tube and catheter were removed on the ninth day; cure. The case was complicated by dislocation of the left elbow and fracture of the radius.—*Jahrsbricht.d. Spitals zu Basel f. 1885.*

### BONES, JOINTS, ORTHOPÆDIC.

I. Osteoplastic Operation for Hydrorrhachis (Spina Bifida). By Dr. J. DALLINGER (Budapest). The idea that complete treatment of this trouble would necessitate closure of the vertebral cleft had been previously suggested (König), and in one case (by Mayo Robson, of Leeds, 1883) an unsuccessful attempt had been made at closing such a fissure in a child of 6 days by means of periosteum from a rabbit.

D.'s case was that of a girl who at birth had a soft, nut-sized, red spot in the mid-lumbar region. This grew with the child. Extremities at first normal. Incontinence of urine and feces by the end of the first year. Walked for a while at two years of age. The sack had then been punctured and a small quantity of fluid withdrawn, but to no purpose. When five years old, D. found the tensely-filled tumour 36 cm. in circumference. The enlargement was non-pulsatile, but compressible without the production of nervous symptoms. Walking scarcely possible. Club-foot on both sides and slight knee-contracture from spastic condition of foot and knee flexors.

Since the sack had a broad base he did not try injections. Thirty grms. of clear fluid were drawn off without any reaction. A week later 150 grms. were removed, the sack relaxing. For some time after this, in the supine position, urine could be retained, and the spasm of lower extremity muscles ceased. In two days the sack was again full and the symptoms returned. After another week puncture repeated with like temporary improvement. An operation seemed warrantable. The sack was slit up. Its inner wall was continuous with the spinal

dura mater, the sack communicating by a 1 ctm. wide opening with the spinal canal. One  $\frac{3}{4}$  mm. thick and several thinner nerve filaments came out through the opening and passed to the sack-wall. During the whole operation fluid came from the opening. The whole sac was removed, the nerves cut off short, arteries tied and the dura stump firmly sewed up. The stump was then freed from the edges of the fissure, when it quickly sank back into the spinal canal. The intervertebral ligament between fifth lumbar vertebra and sacrum became visible, proving the sac to have been the distended lower end of the spinal dura. The sacral nerves passed down at the sides. Only the fifth lumbar vertebra was not united posteriorly. A thick layer of fat surrounding the neck of the sac was next removed. The tendon attachments of musculus multifidus and m. erector trunci were seen to surround the whole opening. A long, oval incision about 3 ctm. to each side was made, and the musculature divided down to the bone. The rudiments of the bony arch were partly pried, partly broken over until they met in the middle line, where they were sewed together. The severed muscle and tendon masses, and finally the skin, were also brought together. The cure was only interrupted by gangrene of a small portion of the thin skin. It was noticed during the operation that the instant the sac was emptied, the prolapsed rectum was retracted. A day later the urine could be retained for a short time, and in a few days the bowel movements were anticipated by the child. She got up at the end of a month and since then runs around lively. From 100 to 150 grms. urine can be retained, though at night the bed is wet. Clothing still occasionally soiled. The peculiarly favorable effect noticed each time on emptying the sack, he presumes, was owing to a relaxation of nerves which had been pulled or bent.—*Wien. Med. Woch.*, 1886, No. 46.

W. BROWNING (Brooklyn).

II. Dislocation of the Hip. By Prof. HUMPHREY. In a lecture delivered in Cambridge and printed in the *Lancet* of November 26, Prof. Humphrey combats the view which has lately been propounded that the dislocations of the hip in which the head of the thigh

bone passes backwards, or backwards and upwards, take place when the limb is in a state of abduction. He gives the dissection of three cases in which the accident took place in the living body, and of two in which he produced the dislocation in the dead body in the adducted and inverted position; and it was evident in each that the head of the bone had passed through a rent in the back, or back and under, part of the capsule, into the position in which it had occupied, directly, or as a direct result of the force applied. The pubo-femoral ligament was entire, which would not have been the case had the limb been dislocated in the position of abduction. The head of the bone passes commonly in the space between the two obturators, not under the obturator externus, and those muscles with the gemelli and the quadratus femoris are more or less torn. In some instances the head of the bone passes through the capsule at a rather higher level under the obturator internus which is then torn through together with one or both of the gemelli. The round ligament is always either rent across or torn from the dimple on the thigh bone. The ilio-femoral ligament escapes in consequence, partly, of its great strength. He gives examples from his early experience of the difficulty sometimes experienced in the reduction of the dislocation. In one of these, attempts with pulleys and other means were made for more than four hours, thirty-six ounces of blood were taken from the arm, and twelve grains of tartar emetic were given without effect, the patient was returned to bed with the dislocation unreduced, abscesses followed and he died. This was before anæsthetics were dreamed of. He contrasts with this, and gives the rationale of the modern method of reduction by manipulation under anæsthetics, and mentions the liability to redislocation during examination of the limb made to ascertain whether reduction has been effected, especially in cases in which the dislocation has for some time remained unreduced.

**III. Compound Separation of the Lower Epiphysis of the Tibia with or without Fracture of the Fibula.** By HENRY E. CLARK (Glasgow). The author describes two cases of this form of injury which had come under his notice. Case I. John

McGee, æt. 13, was admitted with what at first was supposed to be a compound dislocation of the left ankle.

While playing in an iron store a large sheet of iron fell forwards and struck him on the inner side of the left leg. On examination there was found to be a wound about two inches in diameter, much lacerated, and through which protruded the end of the shaft of the tibia. The end of the bone was irregular, but showed no appearance of fracture. It was rounded, and had the character of a diaphysis from which the epiphysis had been separated. The periosteum had been stripped off the bone for about two inches from the end on the inner surface, but somewhat less on the outer. The denuded bone was pale, but showed numerous pink spots dotted over its surface. The ankle-joint was uninjured, as also were the tibial arteries and nerves. The fibula was fractured about two inches above the tip of the external malleolus. In consideration of the age of the patient and the integrity of the ankle-joint, as well as the healthy appearance of the bone it was decided to try and save the limb, but it was found necessary to resect about three-quarters of an inch of the exposed diaphysis before it was found possible to reduce the deformity. The wound was well washed out with 1:20 aqueous solution of carbolic acid and dressed antiseptically. Suppuration occurred, and the wound healed by granulation, no necrosis of the bone taking place. On the last occasion upon which the patient was seen, the opportunity was taken of examining and measuring the leg, when it was found that the right tibia measured 30.5 cm. and the left 28.5, showing a shortening of 2 cm., about the amount resected in reducing the displacement immediately after the injury. It would appear, therefore, that there had been no arrest of the growth of the limb during the year and ten months since the accident, and this was the more evident as the lad had himself grown considerably in height in the interval. The movements of the ankle joints were perfect, and patient could bear his full weight upon it.

CASE II.—J. W., æt. 13, was admitted with what was believed to be a compound dislocation of the left ankle. On examination, however, the ankle joint was found to be intact, and that the lesion was in truth a compound separation of the lower epiphysis of the tibia. The dia-

physial end had been forced through the skin, making a wound on the inner side of the leg, just above the ankle, about two inches in length by one and a half in width. The periosteum was stripped off the diaphysis for about an inch, and was so lacerated that it was impossible to get it to cover the bone. Where uncovered the bone was pale, but marked by bright red spots at the openings of the vascular channels. The fibula was not broken, nor was there any separation of its lower epiphysis. The wound was washed out with solution of corrosive sublimate and dressed with carbolic gauze and a wood-wool pad, side splints being applied. At the first dressing, six days afterwards, there was no suppuration. At the next dressing, 24 days afterwards, there was a little suppuration, but the wound was quite superficial. At the end of five weeks from the date of admission the patient was discharged with an excellent limb. The movements of the ankle joint were perfect, and there was no measurable shortening. The author appends to his paper a list of those cases which have been recorded which correspond to his own.—*Glasgow Med. Jour.*, Nov. 18, 1886.

H. PERCY DUNN (London).

#### GYNÆCOLOGICAL.

1. The General Principles Involved in the Removal of the Uterine Appendages. Mr. LAWSON TAIT. This paper was in the main an answer to Sir Spencer Wells in the *International Journal of the Medical Sciences*. With most of it L. Tait entirely agreed.

As to the number of cases in which such an operation should be performed at present till more was known of the subject, no definite statements could be made. With regard to the terms spaying and such like which had been applied to such an operation, there was the greatest objection to their use, for they were most offensive and equally misleading. Such operations must be classed according to the pathological condition that preceded their performance. It was obviously unfair to class removal of the uterine appendages for bleeding myoma with the same operation where it was performed for suppuration of the tubes. In these two cases the cause was different, the diffi-